

Date: Thursday, 12/20/2007 3:24:37 PM  
User: Kim Johnston

# **Process Sheet**

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: STEP WELDMENT
Job Number	: 36497		
Estimate Number	: 12576		
P.O. Number	:	Part Number	: D3562041
This Issue	: 12/20/2007 S.O. No. :	Drawing Number	: D3562 REV D
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: 1 / Type : LARGE FAB ASSY	Drawing Revision	: D
Previous Run	: 35821	Material	:
Written By	:	Due Date	: 1/30/2008 Qty: 5 Um: Each
Checked & Approved By	: <u>12071221</u>		
Comment	: Est Rev:A New Issue 06-11-09 JLM Est rev B ECN 987 07.10.09 EC verified by: DD Est Rev:C ECN1048 07-12-18 DD		

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 D2622120C Extrusion



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Qty	Part #	Description	Batch:
1	D2622-120C	Extrusion	<u>1335618</u>

Check Material for any Dents or Defects

SAD 08:01:31 (5)

2.0 LARGE FAB 1 LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Cut D2622 extrusion as per Dwg D3562

2-Deburr and bevel ends for welding

SAD 08:01:31 5

3.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08:01:31 5

4.0 HAND FINISHING1 HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

SAD 08:01:31 (8)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Thursday, 12/20/2007 3:24:37 PM  
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Drawing Name: STEP WELDMENT

Job Number: 36497

Part Number: D3562041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FF 08-02-04

5

6.0

D3560041

ARM WELDMENT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

ARM WELDMENT

Batch: 335298

FF 08-02-04 5

7.0

D3560043

ARM WELDMENT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

ARM WELDMENT

Batch: 335299

FF 08-02-04 5

8.0

MS20600AD4W5

Blind Rivet



Comment: Qty.: 36.0000 Each(s)/Unit Total : 180.0000 Each(s)

Blind Rivet

batch: M106375 = 32

M106431 = 128

FF 08-02-04 5

9.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1- Transfer drill Rivet holes as per dwg D3562.

2-Touch-up rivet holes with alodine as per dwg d3562

3-Rivet legs using Magnabond as per dwg D3562.

\*\*\*\*\*Ensure to wipe off any excess magnabond \*\*\*\*\*

A/R Magnabond 6398

Batch: M106695 M104677

FF 08-02-05 5  
FF 08-02-05 5  
FF 08-02-05 5

10.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

FF 08/20/07 15046

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
2008/2/26	8	CHANGE QTY PER UNIT TO 32 AS PER DRAWING BLIND RIVET MS 20600 AD4WS <i>form change</i>	<i>[Signature]</i>	2008/2/26	32	<i>[Signature]</i>	<i>[Signature]</i> 2008-2-26

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Drawing Name: STEP WELDMENT

Job Number: 36497

Part Number: D3562041

Job Number:



Seq. #:

Machine Or Operation:

Description :

11.0

D2734

206 Step Endplate



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D2734

End Cap

B34485

08-02-19

12.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Weld end caps as per Dwg D3562& QSI 004. Inspect for foreign objects as per QSI 024.

A/R Aluminum Rod M105058

08-02-20

2-Grind end cap welds flush as per Dwg D3562

SNO 08/02/21

13.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

08-02-21

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08-02-22

15.0

POWDER COATING

POWDER COATING



M107005

touch up  
alodine



FL/M 08/02/22

Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

08-02-25

16.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Wing Walk as per Dwg D3562 and QSI 005 4.4

Batch: M106894

FL 08/02/25

17.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

MF 08-02-26

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: 12 Date: 08/02/20  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Job Number:



Seq. #:

Machine Or Operation:

Description :

18.0

PACKAGING 1

PACKAGING RESOURCE #1



*See W/D 36496*



Comment: PACKAGING RESOURCE #1

Pick Assembly Kit

*2/26/08*

*50 8*

19.0

QC21

FINAL INSPECTION/W/O RELEASE



*(5)*

Comment: FINAL INSPECTION/W/O RELEASE

*2/26/08*

Job Completion



*2/26/08*

*(5)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

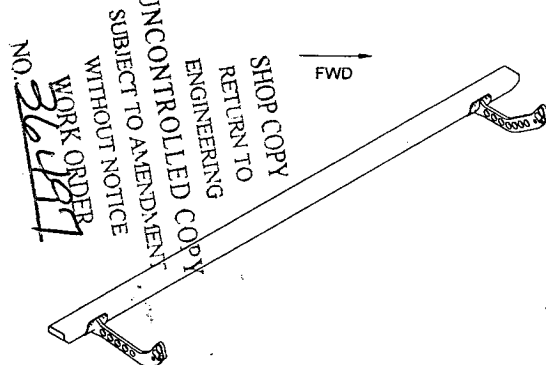
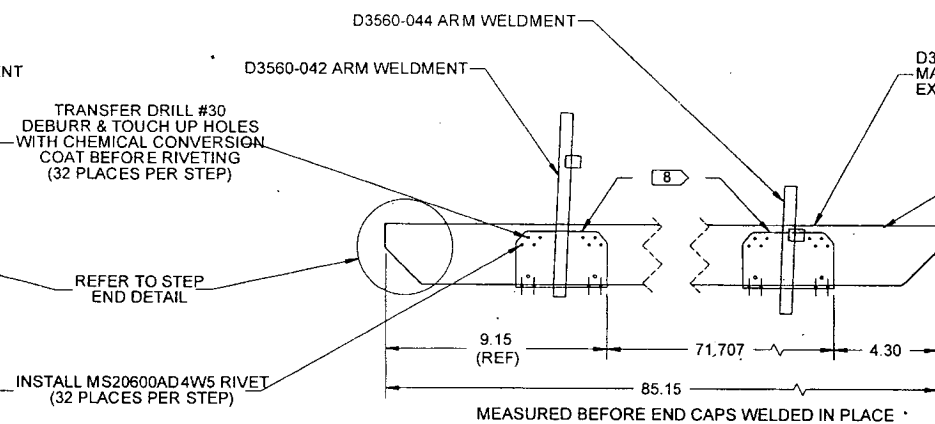
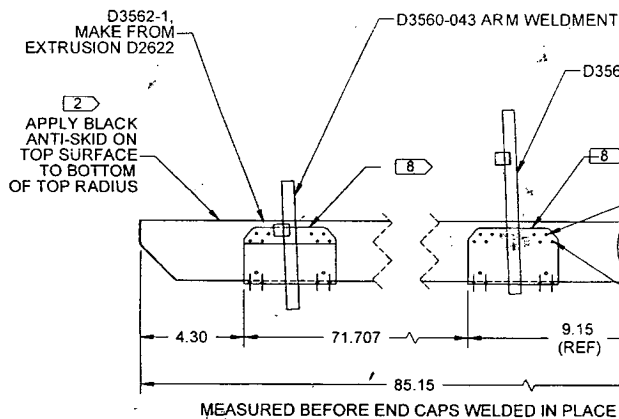
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QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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NOTE: Date & initial all entries

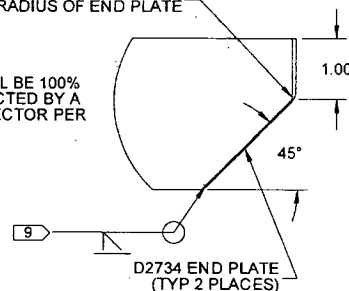




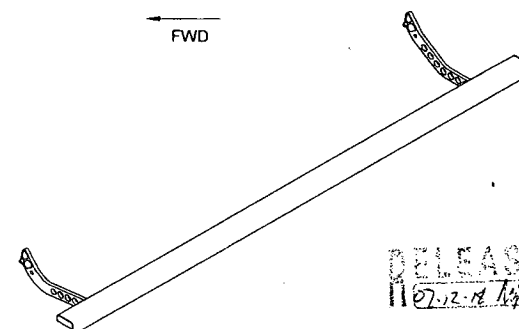
**D3562-041 LH STEP ASSEMBLY**

ROUND CORNER OF EXTRUSION TO MATCH BEND RADIUS OF END PLATE

NOTE: ALL WELDS SHALL BE 100% VISUALLY INSPECTED BY A QUALIFIED INSPECTOR PER DART QSI 004



**TYPICAL STEP END DETAIL  
SCALE 1:2**



**D3562-042 RH STEP ASSEMBLY**

**NOTES:**

1) MATERIAL: N/A

2) FINISH:

i) CHEMICAL CONVERSION COAT STEP EXTRUSION

PER DART QSI 005 4.1 BEFORE ASSEMBLY

ii) POWDER COAT ASSEMBLY GLOSS WHITE (4.3.5.1) OR GREY SANDTEX (4.3.5.6) OR BLACK SANDTEX (4.3.5.7) OR GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3

iii) BLACK ANTI-SKID PAINT PER DART QSI 005 4.4

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: NONE

7) WEIGHT: 8.79 lbs

8) INSTALL ARM WELDMENTS WITH A LAYER OF MAGNOBOND 6398 BETWEEN THE ARM WELDMENT AND STEP EXTRUSION. FILL ANY TOOLING HOLES WITH MAGNOBOND 6398. CLEAN OFF EXCESS BEFORE POWDER COATING.

9) WELDING: PER DART QSI 004

QTY -041	QTY -042	P/N	DESCRIPTION
X		D3562-041	LH STEP ASSEMBLY
	X	D3562-042	RH STEP ASSEMBLY
1		D3560-041	ARM WELDMENT
1	1	D3560-042	ARM WELDMENT
1		D3560-043	ARM WELDMENT
1	1	D3560-044	ARM WELDMENT
1	1	D3562-1	STEP EXTRUSION
32	32	MS20600AD4W5	RIVET
2		D2734	END PLATE

D	REMOVE D2808 SPACER NOTE: REDRAWN IN SOLIDWORKS	DC	07.11.16
C	NOW MAGNOBOND, ADD D2808, REMOVE 4 RIVETS	CP	07.06.19
B	ARMS NOW RIVETED TO STEP	CP	07.01.15
A	NEW ISSUE	CP	06.09.26
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	07.11.16		
<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA DRAWING NO. <b>D3562</b> TITLE <b>STEP ASSEMBLY</b> SCALE <b>1:5</b> REV. D SHEET 1 OF 1 COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			